

Partial Listing



US005482139A

United States Patent [19]

[11] Patent Number: 5,482,139

Rivalto

[45] Date of Patent: Jan. 9, 1996

[54] AUTOMATED DRIVE-UP VENDING FACILITY

5,235,509 8/1993 Mueller et al. 364/405
5,271,703 12/1993 Lindqvist et al. 186/55 X
5,401,946 3/1995 Weinblatt 235/383 X

[75] Inventor: Michael A. Rivalto, Memphis, Tenn.

FOREIGN PATENT DOCUMENTS

[73] Assignee: M.A. Rivalto Inc., Memphis, Tenn.

4134872 4/1993 Germany 186/55
4199498 7/1992 Japan 235/383

[21] Appl. No.: 389,319

Primary Examiner—Michael S. Huppert

[22] Filed: Feb. 16, 1995

Assistant Examiner—Scott L. Lowe

Attorney, Agent, or Firm—Lyman R. Lyon

[51] Int. Cl.⁶ E04H 3/02

[57] ABSTRACT

[52] U.S. Cl. 186/36; 186/53; 235/383

[58] Field of Search 186/35, 36, 37,
186/41, 49, 52, 53, 55, 56, 57, 69; 235/383

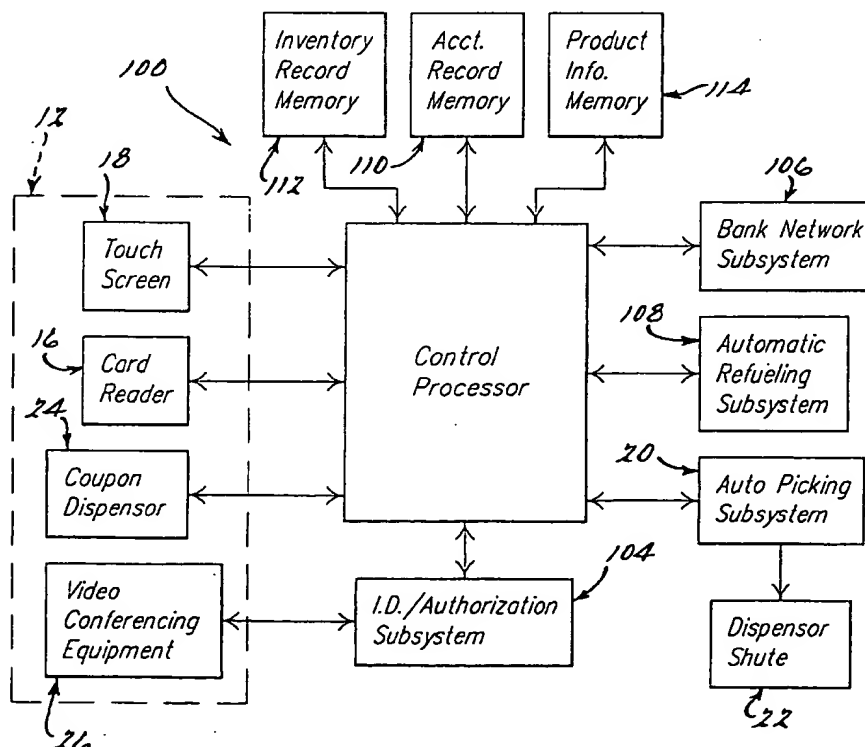
An automated drive-up vending facility (10) and method utilizes a plurality of automatic transaction machines (12) located around the periphery of a storage building (14), whereby customers can drive their vehicles along side the building, insert an account/debit card into a card reader (16), and make product selections via a touch screen display terminal (18). The products are stocked within building (14), and an automated picking/sorting subsystem (20) retrieves the selected products for deposit into a dispensing chute (22). Selection and product information is provided at the display terminals (18) via an interactive menu driven program. Selection of products subject to sales restrictions automatically activates video conferencing equipment (26) so that a sales attendant can confirm customer authorization to purchase the selected product. Customer purchasing history is stored and analyzed to improve a product's chances of promotional marketing influencing a customer's product selection prior to the completion of a vending transaction.

[56] References Cited

U.S. PATENT DOCUMENTS

3,647,026 3/1972 Alexander et al. 186/1 C
4,073,368 2/1978 Mustapick 186/1 C
4,111,282 9/1978 Vayda, Jr. 186/36
4,169,521 10/1979 Vayda, Jr. 186/36
4,311,211 1/1982 Benjamin et al. 186/53
4,638,312 1/1987 Quinn et al. 186/53 X
4,675,515 6/1987 Lucero 186/41 X
4,803,348 2/1989 Lohrey et al. 235/383 X
4,805,738 2/1989 Vayda 186/36
5,003,505 3/1991 McClelland 364/900
5,016,736 5/1991 Vayda 186/53
5,052,519 10/1991 Woodham 186/53 X
5,113,974 5/1992 Vayda 186/53 X
5,128,862 7/1992 Mueller 364/405
5,158,155 10/1992 Domain et al. 186/53

20 Claims, 5 Drawing Sheets



US-PAT-NO: 5482139

DOCUMENT-IDENTIFIER: US 5482139 A

TITLE: Automated drive-up vending facility

----- KWIC -----

TITLE - TI (1):

Automated drive-up vending facility

Detailed Description Text - DETX (7):

In further accordance with present invention, the control processor 102 is able to use the inventory record memory 112 as a means for automatically tracking and removing dated and/or perishable goods from the inventory by knowing precisely when the particular expiration dates will occur. Further, the control processor can control selection/dispensing of the oldest goods in stock in response to a customer's purchase order for the particular good.